Central Indiana December 2019 Climate Summary

23rd Warmest on Record at Indianapolis

Tied for 58th Wettest on Record at Indianapolis

34th Snowiest on Record at Indianapolis

Temperatures

Much of the month of December was warmer than normal across central Indiana as intrusions of Arctic air were largely bottled up to the north of the region. The month started mild with highs mainly in the upper 40s and lower 50s and lows in the 20s and 30s through the 9th. Beginning on the 10th, the pattern shifted to a colder regime in the wake of a frontal passage with highs falling back into the 30s. After a brief recovery from the 12th to 14th with near normal temperatures, the coldest weather of the month would follow the two part snowstorm that impacted much of the area on the 15th and 16th. The coldest daytime temperatures of December would come on the 18th as much of the region remained in the 20s with single digit lows following the morning of the 19th with clear skies and light winds over a fresh snowpack.

The last third of the month would see the weather pattern transition back to a warmer and much drier pattern with every day from the 22nd through the 30th experiencing daytime highs above 50°. Temperatures surged to near record levels from the 25th and 26th with low to mid 60s common over central Indiana. The high of 62°in Indianapolis on the 25th was the fourth warmest Christmas Day on record and for the entire region, the warmest Christmas in 37 years. Temperatures would remain well above normal until a strong cold front passed through the region late on the 29th and early on the 30th. Temperatures would fall back into the 30s to wrap up the end of the month and year.

Much of central Indiana ended up with average temperatures of 5 to 7° above normal for December. Indianapolis would experience 3 days with temperatures of 60° or warmer, the most in December since 2015. Despite the warmer than normal

temperatures, much of the area did very well with snowfall for the month as well courtesy of the two part system that dropped several inches of snow on the 15th and 16th.

Site	December 2019	December	Highest	Lowest
	Avg Temp	2019	Temperature	Temperature
		Difference		
		from Normal		
Indianapolis	37.0	+5.4	65 on 26	9 on 19
Lafayette	35.3	+4.9	64 on 26	7 on 19
Muncie	37.8	+7.1	66 on 26	8 on 18
Terre Haute	37.0	+5.4	67 on 26	5 on 19
Bloomington	39.0	+6.8	66 on 25	12 on 19
Shelbyville	37.8	+6.0	66 on 26	4 on 19
Indy – Eagle Crk.	36.6	+4.9	65 on 26	8 on 19

At Indianapolis, there were 21 days with above normal average temperatures, 9 days with below normal average temperatures and 1 day with normal average temperatures.

December 2019 was the 23rd warmest in the Indianapolis area since weather records began in 1871.

Precipitation and Snowfall

The month of December was a near normal month in terms of precipitation. Rainfall amounts generally ranged from 2 to 4 inches with the heaviest amounts across the eastern and southeastern portions of the state. Snowfall amounts were near to slightly above normal for the month with much of the snow occurring from the 15th to the 17th.

A widespread rain event occurred on December 8th and 9th as a result of warm advection ahead of a cold front. This brought rainfall amounts of a quarter to half an inch north, to half an inch to over an inch central and south, with a tapering down to a quarter inch or less right along the Ohio River. No flooding occurred as a result of this rainfall, but small streams did show pretty decent responses.

A significant snowfall occurred from December 15th into the morning of the 17th across much of central Indiana. The heaviest snow fell generally along the I-70 corridor with two day snowfall totals ranging from 4 to 7.5 inches. Further south, snow mixed with some freezing rain along with heavier rain. Total liquid amounted to between 0.75 and 1.5 inches with the highest amounts across south central Indiana.

From the 18th through the 28th, much of the state remained dry with much of the snow melting by Christmas. A widespread rain event moved through central Indiana between

the 28th and 29th bringing 1 to 2 inches to central Indiana which lead to minor flooding along portions of the lower White River, upper Wabash, and a few smaller streams.

Indianapolis ended up with 7.6 inches of snow for the month, the most in December since 2013.

Site	December 2019 Precipitation	December 2019 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	3.05	-0.12	1.08 on 29	8 days 19-26
Lafayette	2.37	-0.14	0.93 on 29	10 days 18-27
Muncie	2.05	-0.83	0.62 on 1	10 days 18-27
Terre Haute	2.79	-0.26	1.48 on 29	10 days 18-27
Bloomington	3.22	-0.32	1.21 on 29	10 days 18-27
Shelbyville	3.53	+0.26	1.12 on 29	9 days 19-27
Indy – Eagle Crk.	2.23	-0.85	0.71 on 9	9 days 19-27

December 2019 was tied for the 58th wettest in the Indianapolis area since weather records began in 1871.

Severe Weather

There was no severe weather across central Indiana in December.

For information on severe weather in other areas during December, visit the Storm Prediction Center "Severe Weather Event Summaries" website at http://www.spc.noaa.gov/climo/online/.

Miscellaneous

The maximum wind gust at Indianapolis International Airport was 45 mph out of the west on the 30th as strong low pressure passed through the Great Lakes. Fog or haze was reported at Indianapolis on 17 days during the month, with dense fog reported on the 24th. Freezing rain occurred on the 16th with freezing drizzle on the 31st.

January 2020 Outlook

The official outlook for January 2020 from the Climate Prediction Center indicates greater chance of near to above normal temperatures. At Indianapolis, the average temperature for the month is 28.1 degrees. A greater chance of above average precipitation exists as well. The average precipitation for January at Indianapolis is 2.66 inches, with 8.6 inches of snowfall.

Data prepared by the Indianapolis Forecast Office.